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## **CET-2030 Construction Graphics** **ODOT Required Figures**

The following figures (taken from the Ohio Department of Transportation, Location and Design Manual Volume one) are required for you to understand the principles of highway design and aid you in homework, quiz and final exam problems. The figures can be downloaded from the ODOT website at:

<http://www.dot.state.oh.us/Divisions/ProdMgt/Roadway/roadwaystandards/Pages/locationanddesignmanuals.aspx>

### Section 200 Horizontal & Vertical Design

- Figure 201-1E Stopping Sight Distance
- Figure 202-1E Max Centerline Deflections w/o Horizontal Curve
- Figure 202-2E Max Degree of Curve
- Figure 202-4E Superelevation Transitions
- Figure 202-5aE Superelevation Development on 2 Lane Undivided Highways
- Figure 202-7E Superelevation on Rural Highways
- Figure 202-8E Superelevation on High Speed Urban Highways
- Figure 202-9E Superelevation on Low Speed Urban Streets
- Figure 203-1E Maximum Grades
- Figure 203-2E Max Change in Vertical Alignment w/o Vertical Curve
- Figure 203-3E Crest Vertical Curves
- Figure 203-6E Sag Vertical Curves

### Section 300 Cross Section Design

- Figure 301-2E Rural Lane Widths
- Figure 301-3E Rural Shoulder Criteria
- Figure 301-4E Urban Roadway Criteria
- Figure 301-5E a & b Pavement Widening on Highway Curves
- Figure 301-8E Paved Shoulder Cross-slopes
- Figure 307-1E Safety Grading Sections
- Figure 307-2E Recoverable Ditch Sections
- Figure 307-3E Clear Zone Grading Sections
- Figure 307-4E Standard and Barrier Grading Sections
- Figure 307-10E & 11E Preferred Cross Sections

### Section 600 Roadside Design

- Figure 600-1E Clear Zone Widths
- Figure 601-1E Barrier Warrants for Embankments
- Figure 602-1E Barrier Length of Need